ACI Automation Demo – Real-world DC Migration Scenario

Andrei Svetski – Cisco AS – ACI Delivery

asvetski@cisco.com

0466725936

# Collect information about the legacy network by auditing the existing DC switches and firewalls

## Use pre-created script to parse text configuration files of the legacy switches and firewalls. The script will generate a CSV file containing information about existing VLANs including:

## Scope – local to a DC, or present in both DCs

## IP subnet

## Default gateway(s) IP(s)

## Which device(s) is(are) act as gateways

## Make a note that the legacy network is complex, with is a range of deployment scenarios for each VLAN:

## Subnets with gateway on the DC switches, local to each DC

## Subnets with gateway on the DC switches using VRRP to maintain active-active redundancy between the two DCs

## Subnets with gateway on the perimeter firewalls

## Subnets with no gateway at all, or non-IP subnets

# Based on the information collected, document the desired target state DC configuration

## The approach we are taking is to migrate the existing network into the ACI “like for like”. The legacy networking will be re-created in the ACI inside a new tenant which we call “network-centric”

## Manually create an object of each required type (such as BDs, Subnets, EPGs, and APs) using APIC GUI

## Use ‘save as’ feature to export the object configuration into JSON files. These will serve as templates for the scripted creation of the objects.

## Edit the CSV file generated in Step 1 to include the desired parameters for the new ACI tenant:

## Remove VLANs to be decommissioned

## Enter the ACI Gateway IPs, and add custom MAC addresses

## Generate code required to automatically provision tenant policy. We do this by using Arya tool to generate ACI Cobra code from the JSON files saved in step 2 and populate a pre-created script with the generated code

# Programmatically deploy “network-centric” tenant policy on two ACI fabrics

## Use the CSV file together with the script from step 2

## Run the script to automatically provision new “network-centric” tenant configuration on the demo fabric

## Using the APIC GUI, verify the new tenant was created and populated with the objects for all required VLANs and Subnets